COURSE OUTLINE

1. GENERAL

SCHOOL	AGRICULTURAL SCIENCES		
ACADEMIC UNIT	AGRICULTURE		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	AGRI EX18	**SEMESTER OF STUDIES**	7th or 9th
COURSE TITLE	ANIMAL PESTS OF HUMAN HEALTH STORED PRODUCTS AND WOOD		

INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*	**WEEKLY TEACHING HOURS**	**CREDITS**
Lectures	2	
Laboratory exercises	2	
Total	4	5
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (4).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Specialised general knowledge
PREREQUISITE COURSES:	Typically, there are no prerequisite courses.
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek.
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No
COURSE WEBPAGE (URL)	

2. LEARNING OUTCOMES

Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

By the end of this course the student will have developed the following skills (general abilities):

have the necessary knowledge and familiarity at a theoretical and practical level with the morphology, biology, ecology, symptomatology, diagnosis and treatment of post-harvest pests that infect/pollute agricultural products, wood and/or influence human health and the urban environment.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	*Project planning and management*
Adapting to new situations	*Respect for difference and multiculturalism*
Decision-making	*Respect for the natural environment*
Working independently	*Showing social, professional and ethical responsibility and sensitivity to gender issues*
Team work	*Criticism and self-criticism*
Working in an international environment	*Production of free, creative and inductive thinking*
Working in an interdisciplinary environment	*……*

Production of new research ideas	*Others…* *…….*

Generally, by the end of this course the student will, furthermore, have develop the following general abilities (from the list above):

Decision making
Respect for the Environment
Promotion of free, creative and inductive thinking

3. SYLLABUS

1. Stored product pests, importance and general characteristics.
2. Primary pests of stored products and wood: Lepidoptera and Coleoptera.
3. Secondary pests of stored products and wood: Lepidoptera and Psocoptera
4. Secondary pests of stored products and wood: Coleoptera
5. Mite pests of stored products
6. Natural pest control methods
7. Chemical Pest control methods
8. Alternative pest control methods
9. Dictyoptera, Siphonaptera, Hemiptera, Anoplura Psoroptidae
10. Muscidae, Tabanidae, Psychodidae
11. Sarcophagidae, Simuliidae, Ceratopogonidae, Culicidae), Psoroptidae, Sarcoptidae, Demodicidae, Ixodidae, Argastidae
12. Insects and mites of urban greenery
13. Rodentia

Laboratory exercises:

1. Sampling, identification of perfect individuals and imperfect stages of primary and secondary storage insects in various stored agricultural products and foods.
2. Identification of main genera and species of mites in various stored agricultural products and foods.
3. Rodents: identification of species and infestations.
4. Insecticides, acaricides, rodenticides for animal enemies of stored agricultural products and food - special mention of fumigants. Traps for monitoring / dealing with animal enemies of stored agricultural products and food.
5. Identification of main insects of urban interest: Dictyoptera, Siphonaptera, Hemiptera, Anoplura Psoroptidae
6. Identification of main insects and mites of urban interest: Diptera (Muscidae, Tabanidae, Psychodidae, Sarcophagidae, Simuliidae, Ceratopogonidae, Culicidae), Psoroptidae, Sarcoptidae, Demodicidae, Ixodidae, Argastidae.

4. TEACHING AND LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Lectures, self-tests of students and problem-solving seminars.
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES *Use of ICT in teaching, laboratory education, communication with students*	Use of Information and Communication Technologies (ICTs) (e.g. powerpoint) in teaching. The contents of the course of each chapter are uploaded on the internet, in the form of a series of pdf files that the students can freely download using a password which is provided to them at the beginning of the course.
TEACHING METHODS *The manner and methods of teaching are described in detail.* *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational*	

Activity	***Semester workload***
Lectures (2 contact hours per week x 13 weeks)	26
Laboratory work (2 contact hours per week x 6 weeks)	12
Individual assignment	12
Hours for private study of the	75

visits, project, essay writing, artistic creativity, etc. *The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS*	student, preparation and attendance mid-term or/and final examinations.	
	Total number of hours for the Course (25 hours of work-load per ECTS credit)	***125 hours (total student work-load)***
STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure* *Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other* *Specifically-defined evaluation criteria are given, and if and where they are accessible to students.*	1. Mandatory written examination, with full length questions and / or multiple choice questions, as well as questions based on the laboratory work. Minimum pass grade= 5, scale 0-10. 2. Total degree contribution 100%. 3. All the above are conducted in Greek.	

5. ATTACHED BIBLIOGRAPHY

Suggested bibliography: Related academic journals

1. Journal of Stored Products Research Journal of Insect Science
2. Journal of Economic Entomology Journal of Medical Entomology Crop Protection
3. Journal of Pest Science Pest Management Science Journal of Food Protection
4. Journal of Applied Entomology